

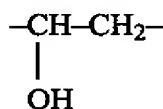
### **Listing of Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

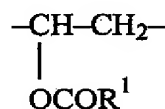
1. (currently amended) Heat-sensitive element comprising

- (a) a substrate; and
- (b) a coating on the substrate, the coating comprising
  - (i) at least one novolak resin,
  - (ii) at least one component that reduces the aqueous alkaline developer solubility of novolak, wherein said reduction in solubility is reversed upon the application of heat, wherein the component is a novolak functionalized with substituents capable of forming a four-center hydrogen bridge bond, and
  - (iii) at least one acidic polyvinyl acetal comprising the structural units (A), (B), (C)

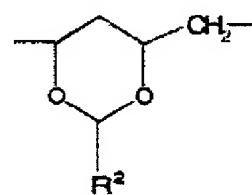
(A)



(B)

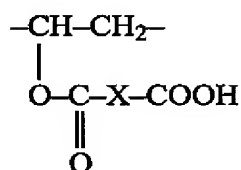


(C)

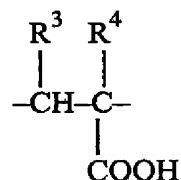


and (D), wherein (D) is at least one unit selected from (D-1), (D-2), and (D-3):

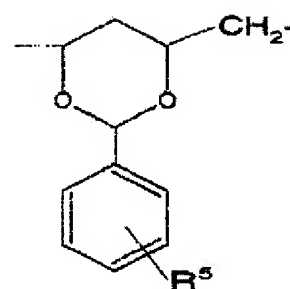
(D-1)



(D-2)



(D-3)



wherein

$R^1$  is a hydrogen atom or a  $C_1$ - $C_4$  alkyl group,  $R^2$  is a hydrogen atom or a  $C_1$ - $C_{18}$  alkyl group,  $R^3$  is a hydrogen atom or a  $C_1$ - $C_4$  alkyl group,  $R^4$  is a hydrogen atom or a  $C_1$ - $C_4$  alkyl group,  $R^5$  is  $-\text{COOH}$ ,  $-(\text{CH}_2)_a-\text{COOH}$ ,  $-\text{O}-(\text{CH}_2)_a-\text{COOH}$ ,  $-\text{SO}_3\text{H}$ ,  $-\text{PO}_3\text{H}_2$  or  $-\text{PO}_4\text{H}_2$ ,  $a$  is an integer from 1 to 8, and  $X$  is selected from



wherein  $n$  is an integer from 1 to 6, each  $R^6$  and  $R^7$  is independently selected from a hydrogen atom and a  $C_1$ - $C_6$  alkyl group, and  $R^8$  and  $R^9$  are independently selected from a hydrogen atom and a  $C_1$ - $C_6$  alkyl group or  $R^8$  and  $R^9$ , together with the two carbon atoms to which they are bonded, form a substituted or unsubstituted aryl or heteroaryl group.

2. (cancelled)
3. (previously presented) Heat-sensitive element according to claim 1, wherein the structural units (A), (B), (C) and (D) are present in the following amounts in the polyvinyl acetal, based on the weight of the polyvinyl acetal:
  - (A) 10 to 40 wt.-%
  - (B) 0.1 to 25 wt.-%
  - (C) 10 to 80 wt.-%
  - (D) 1 to 40 wt.-%
4. (previously presented) Heat-sensitive element according to claim 1, wherein the polyvinyl acetal has an acid number of 10 to 160 mg KOH/g polymer.
5. (previously presented) Heat-sensitive element according to claim 1, wherein  $R^1$  is  $-\text{CH}_3$ .
6. (previously presented) Heat-sensitive element according to claim 1, wherein  $R^2$  is  $-(\text{CH}_2)_2\text{CH}_3$ .

7. (previously presented) Heat-sensitive element according to claim 1, wherein unit D has the formula D-1.
8. (previously presented) Heat-sensitive element according to claim 7, wherein X is  $-\text{CH}=\text{CH}-$ .
9. (previously presented) Heat-sensitive element according to claim 1, wherein unit D has the formula D-2.
10. (previously presented) Heat-sensitive element according to claim 9, wherein  $\text{R}^3$  and  $\text{R}^4$  are hydrogen.
11. (previously presented) Heat-sensitive element according to claim 1, wherein unit D has the formula D-3.
12. (previously presented) Heat-sensitive element according to claim 11, wherein  $\text{R}^5$  is  $-\text{COOH}$ .
13. (previously presented) Heat-sensitive element according to claim 1, wherein the novolak resin is present in an amount of 40 to 95 wt.-%, based on the dry weight of the coating.
14. (previously presented) Heat-sensitive element according to claim 1, wherein the component (ii) is present in an amount of 0.1 to 25 wt.-%, based on the dry weight of the coating.
15. (previously presented) Heat-sensitive element according to claim 1, wherein the polyvinyl acetal is present in an amount of 5 to 25 wt.-%, based on the dry weight of the coating.
16. (previously presented) Heat-sensitive element according to claim 1, wherein the coating comprises at least one substance capable of absorbing radiation with a wavelength in the range of 750 to 1120 nm and converting it to heat.

17. (previously presented) Heat-sensitive element according to claim 1, wherein the coating comprises at least one additive selected from polymer particles, surfactants, contrast dyes, pigments, or plasticizers.
18. (previously presented) Heat-sensitive element according to claim 1, wherein said element is a lithographic printing plate precursor.
19. (previously presented) Heat-sensitive element according to claim 18, wherein the substrate is an aluminum substrate subjected to at least one pre-treatment selected from (a) mechanical and/or chemical roughening, (b) anodizing or (c) application of a hydrophilizing layer.
20. (currently amended) Heat-sensitive element according to claim 1, wherein components (i) and (ii) are provided as the same compound in the form of an appropriately functionalized novolak resin.
21. – 25. (cancelled)